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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARVEY, DIONNE

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,834

Applicant(s)

SWERUP ET AL.

Examiner

Dionne N. Harvey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-7,10-15,19-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Collins (US 6,038,313)** in view of **Song (US 6,373,3974)**.

Regarding claim 1,

Collins teaches a method for assigning functions to be represented by keys on a cover lid of a mobile communication comprising: in **column 5, lines 20-25**, Collins teaches a switch for recognizing when the cover **16** is open or closed so as to know which functions to assign to the keys, reading on "detecting whether the cover lid is in a first position or a second position";

Collins teaches that upon detecting the position of the cover lid, a microprocessor, said microprocessor reading on "control unit", may assign certain keys the function of a deactivated state, thus reading on "assigning, by a control unit, a first set of functions to be represented by the keys when the cover lid is detected in the first position; and assigning, by the control unit, a second set of functions to be represented by the keys when the cover lid is detected in the second position;"

Collins does not specifically disclose that the first set of functions and second set of functions are stored in the microprocessor memory within a key table.

In **column 6, lines 6-13**, Song teaches a telecommunication device wherein, depending upon the position of the flip cover **10**, different functions are assigned to the same key member via a key table which is stored within the memory of the CPU **20**.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Collins and Song, substituting the CPU **20** having a key/function table, as taught by Song, for the function assigning microprocessor of Collins, as each reference assigns different functions to the keys depending upon the open or closed position of cover lid of the device.

Regarding claims 2 and 11,

The physical representation of each key and its' printed numerical or alphabetical indicator of the assigned function, has been interpreted by the Examiner as providing a "graphical template" of the keys.

Regarding claims 3 and 12,

In figures **1a and 1b**, Collins teaches a cover lid **16** having first and second positions in which the keys are assigned to respective sets of first and second functions. Collins further teaches that in the second position, so as to present the user with a key arrangement similar to that of the first position, at least two of the key positions are swapped.

Regarding claims 4 and 13,

Shown in **figures 1a and 1b**, Collins teaches that the assignment of the second set of functions results in the position of the keys **19 and 21 being rotated** 90 degrees.

Regarding claims 5 and 14,

Collins teaches that in the second position, the position of the keys are rotated by 180 degrees relative to the first position.

Regarding claims 6 and 15,

Collins teaches a null value to be represented by at least one key in both the first and second set of functions.

Regarding claim 7,

Collins teaches push buttons with alpha-numeric labels, reading on "indicating on a surface of the keys the second set of functions."

Regarding claim 10,

In **figures 1a and 1b**, Collins teaches a mobile communication device having keys mounted on a cover lid, comprising : in **column 5, lines 30-35**, Collins teaches that a microprocessor, reading on "a control unit", determines whether a short circuit relates to the open position or the closed position of the cover lid **16**, and further teaches that the "control unit" is capable of identifying each key by a voltage value so as to determine the appropriate function of said key, thereby teaching a "memory unit";

In **column 5, lines 19-25**, Collins teaches a switch for recognizing when the cover is open or closed, which reads on "a detector unit capable of detecting a movement of the cover lid from a first position to a second position";

Collins thereby teaches that the "control unit" is connected to the memory unit and the detector unit, so as to assign key function dependent upon the detected position of the cover lid, reading on, "the control unit configured to assign the first set of functions to the keys when the cover lid is detected in the first position, and to assign the second set of functions to the keys when the cover lid is detected in the second position;"

Collins does not specifically disclose that the first set of functions and second set of functions are stored in the microprocessor memory within a key table.

In **column 6, lines 6-13**, Song teaches a telecommunication device wherein, depending upon the position of the flip cover **10**, different functions are assigned to the same key member via a key table which is stored within the memory of the CPU **20**.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Collins and Song, substituting the CPU **20** having a key/function table, as taught by Song, for the function assigning microprocessor of Collins, as each reference assigns different functions to the keys depending upon the open or closed position of cover lid of the device.

Regarding claim 19,

Collins teaches a keypad for a mobile communication device, comprising : two sets of keys (**see, figures 1a and 1b**), thereby reading on "a plurality of mechanical keys mounted on the keypad; Collins teaches that depending on the open or closed state of the cover lid, the functions of the plurality keys may be altered, that is, with the cover lid **16** in an open position, the keys being disposed on the outer side of the cover

lid may be assigned the function of a “deactivated state”, thus reading on “and capable of performing a first set of functions and a second set of functions”;

When the cover lid 16 is not in an open position, those keys which are disposed on the outer surface have a first set of functions, thus reading on “the plurality of mechanical keys configured to perform a first set of functions when a predetermined event has not occurred”;

When the cover lid 16 has been moved to an open position, those keys which are disposed on the outer surface have a second set of functions, which may be that of a “deactivated state”, thus reading on “the plurality of mechanical keys configured to perform a second set of functions when a predetermined event has occurred”;

In **column 5, lines 30-35**, Collins teaches a microprocessor, reading on “a control unit”, and further teaches that the “control unit” is capable of identifying each key by a voltage value so as to determine the appropriate function of said key, thereby teaching a “memory unit”;

Collins does not specifically disclose that the first set of functions and second set of functions are stored in the microprocessor memory within a key table.

In **column 6, lines 6-13**, Song teaches a telecommunication device wherein, depending upon the position of the position of a flip cover **10**, different functions are assigned to the same key member via a key table which is stored within the memory of the CPU **20**.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Collins and Song, substituting the CPU **20** having

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a key/function table, as taught by Song, for the function assigning microprocessor of Collins, as each reference assigns different functions to the keys depending upon the open or closed position of cover lid of the device.

Regarding claims 20-21,

In **figures 1a-1b**, Collins teaches that the mechanical keys include numeric and alphabetic keys.

Regarding claim 22,

In **figures 1a and 1b**, Collins teaches that the mechanical keys include alphanumeric keys.

Regarding claim 23,

In **column 3, line 52-58**, Collins teaches a special pen, which reads on “a pointing device” capable of performing a first and second set of functions when a predetermined event has OR has not occurred.

Regarding claim 24,

Collins teaches that the predetermined event includes pressing one or more predefined keys.

Regarding claim 25,

In **column 3, lines 33-48**, Collins teaches that the predetermined event includes initiating one or more predefined applications in the mobile communication device.

Regarding claim 26,

Collins teaches that the predetermined event, such as answering an incoming call, includes opening the cover lid.

2. **Claims 8,9 and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Collins (US 6,038,313)** in view of **Song (US 6,373,3974)**, as applied to claims 7,10 above, and further in view of **Gray (US 5,987,310)**.

Regarding claims 8,9 and 16-18,

Collins does not clearly teach forming raised/tactile or Braille characters on the surface of the keys. In **column 3, lines 7-8**, Gray teaches that it is desirable to provide a Braille keypad in a cellular phone device. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Collins and Gray, including Braille characters on the surface of the keys, thereby permitting the use of the mobile communications device by blind persons.

Response to Arguments

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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